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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/709,767

05/27/2004

Hung-Lieh Hu

13292-US-PA

3766

31561

7590

06/27/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE

7 FLOOR-1, NO. 100

ROOSEVELT ROAD, SECTION 2

TAIPEI, 100

TAIWAN

EXAMINER

GARCIA JR, RENE

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/709,767		HU ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Rene Garcia, Jr.		2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 8-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/27/04; 5/11/06</u>  | 6) <input checked="" type="checkbox"/> Other: <u>IDS 3/24/05</u>            |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 8-20 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species and combination, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 18 May 2006.
2. Group II, claims 17-20, have not been examined as requested by the applicant in Election/Restriction Response filed 18 May 2006 for the following reason(s): a restriction requirement has been deemed proper between Groups I and II as being a Subcombination and Combination relationship; Examination of both groups would require a significantly different search (i.e. burdensome) with regards to the distinct inventions claimed with respect to claims 1-7 and 17-20.

### *Priority*

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

4. With regards to Information Disclosure Statement filed on 24 March 2005, Patent 6,437,963 has not been considered for reason stated in applicant's Information Disclosure Statement filed on 11 May 2006 (typo with Patent Number, corrected in newly submitted IDS)
5. The drawings are objected to because Figure 8 list reference numbers 813 and 821 as "nozzle set" while specification refers to them as "nozzle" – keep consistency between drawings and specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement

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drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because it contains legal phraseology (comprises). Correction is required. See MPEP § 608.01(b).

8. The disclosure is objected to because of the following informalities: Page 5 line 1 – "nozzle 223" should be "233"; Paragraph 0042, line 4 – "823, 825, 825" should be " 823, 825,

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825””; Paragraph 0040 – “nozzle 813” should be “nozzle set 813” keep consistency with drawing or vice versa if deemed appropriate; Paragraph 0041 – “nozzle 821” should be “nozzle set 821” keep consistency with drawing or vice versa if deemed appropriate.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Torgerson et al. (US 6,481,817).

**Torgerson et al. discloses the following claimed limitations:**

\*regarding claim 1, printhead controller/**print control device, 36/** (col. 5, lines 24-26) comprising:

\*buffer circuit/**controlled terminals/** (fig. 6 – elements 50, 52), for receiving an address signal/**control signal, A(1)/** (fig. 6; col. 1, line 41-43; col. 5, lines 55-59) and a selection signal/**enable signal, E(1)/** (fig. 6; col. 2, lines 58-60, col. 5, lines 60-62), said buffer circuit outputting a buffer signal/**activation signal/** corresponding to said selection signal (col. 5, lines 44-50)

\*ink jetting circuit (fig. 6 – elements 48, 44), for receiving said buffer signal/**activation signal/** and determining whether or not to jet out ink based on said buffer signal (col. 7, lines 14-21; see col. 7, line 36-col. 8, line 54 for more detail in particular)

\*regarding claim 2, address signal is a working driving voltage of said buffer circuit (col. 5, lines 58-60 – logic signals used to drive switching devices either on or off)

\*regarding claim 3, buffer circuit includes a plurality of inverters/**switching devices, 50,52/** (fig. 6; elements 50 and 52) connected in series

\*regarding claim 4, each of said inverters includes a FET/**switching devices, 50, 52/** (fig. 6; col. 7, lines 23-35)

***Allowable Subject Matter***

11. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The primary reason for indicating allowable subject matter of claims 5-7 is the inclusion of the limitations of a printhead controller including buffer circuit with a first resistor, having a first terminal for receiving said address signal; a first FET, having a first terminal being coupled to a second terminal of said first resistor and outputting an inverted signal, a second terminal for receiving said selection signal, and a third terminal being coupled to a ground; a second resistor, having a first terminal for receiving said address signal; and a second FET, having a first terminal being coupled to a second terminal of said second resistor and outputting said buffer signal, a second terminal for receiving said inverted signal, and a third terminal being coupled to said ground. It is these limitations found in each of the claims, as they are claimed in the

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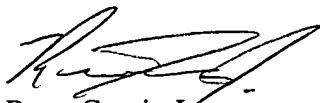
combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

***Communications with the USPTO***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Garcia, Jr. whose telephone number is (571) 272-5980. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rene Garcia Jr  
06/06



**STEPHEN MEIER  
SUPERVISORY PATENT EXAMINER**